

WHAT IS CLAIMED IS:

- 1 1. A method of controlling access to the Internet, the method
2 comprising:
3 sending identification information for a user from a client
4 computer to an Internet access control web server;
5 receiving user web access settings from the Internet access
6 control web server at the client computer, wherein the user web access
7 settings comprise a level of access allowed for the user in at least one
8 category of content;
9 intercepting an Internet access request initiated by an
10 application used at the client computer by the user;
11 extracting a Uniform Resource Locator (URL) from the Internet
12 access request at the client computer;
13 sending the URL to the Internet access control web server from
14 the client computer;
15 receiving URL ratings from the Internet access control web
16 server at the client computer, wherein the URL ratings comprise a rating level
17 in at least one category of content;
18 comparing the URL ratings to the user web access settings at
19 the client computer; and
20 determining if access to the URL should be granted.
- 1 2. The method of claim 1, further comprising sending the Internet
2 access request to a client computer networking layer, if access is granted.
- 1 3. The method of claim 2, further comprising editing the Internet
2 access request to remove the URL and to include a user appropriate URL and
3 sending the edited Internet access request to the client computer networking
4 layer, if access is not granted.

1 4. The method of claim 3, further comprising:
2 storing the URL in a cache at the client computer;
3 storing the URL in the cache as disallowed, if access is not
4 granted;
5 storing the URL in the cache as allowed, if access is granted;
6 intercepting an additional Internet access request initiated by an
7 application used at the client computer by the user;
8 extracting an additional URL from the additional Internet access
9 request at the client computer;
10 comparing the additional URL to each URL in the cache until the
11 additional URL matches a URL stored in the cache or until the additional URL
12 has been compared to each URL in the cache;
13 sending the Internet access request to the client computer
14 networking layer, if the additional URL matches a URL stored in the cache
15 that was stored as allowed;
16 editing the additional Internet access request to remove the
17 additional URL and to include the user appropriate URL, if the additional URL
18 matches a URL stored in the cache that was stored as disallowed;
19 sending the edited additional Internet access request to the
20 client computer networking layer, if the additional URL matches a URL stored
21 in the cache that was stored as disallowed; and
22 clearing the cache when the user logs out from the Internet
23 access control system at the client computer.

1 5. The method of claim 1, further comprising:
2 receiving a user web access override list from the Internet
3 access control web server at the client computer, wherein the user web
4 access override list comprises URLs to which the user is allowed access and
5 URLs to which the user is not allowed access;

6 comparing the URL to the user web access override list at the
7 client computer;
8 determining if access to the URL should be granted at the client
9 computer;
10 sending the Internet access request to a client computer
11 networking layer, if access is granted;
12 editing the Internet access request to remove the URL and to
13 include a user appropriate URL, if access is not granted; and
14 sending the edited Internet access request to the client
15 computer networking layer, if access is not granted.

1 6. The method of claim 6, further comprising:
2 storing the URL in a cache at the client computer;
3 storing the URL in the cache as disallowed, if access is not
4 granted;
5 storing the URL in the cache as allowed, if access is granted;
6 intercepting an additional Internet access request initiated by an
7 application used at the client computer by the user;
8 extracting an additional URL from the additional Internet access
9 request at the client computer;
10 comparing the additional URL to each URL in the cache until the
11 additional URL matches a URL stored in the cache or until the additional URL
12 has been compared to each URL in the cache;
13 sending the Internet access request to the client computer
14 networking layer, if the additional URL matches a URL stored in the cache
15 that was stored as allowed;
16 editing the additional Internet access request to remove the
17 additional URL and to include the user appropriate URL, if the additional URL
18 matches a URL stored in the cache that was stored as disallowed;

19 sending the edited additional Internet access request to the
20 client computer networking layer, if the additional URL matches a URL stored
21 in the cache that was stored as disallowed; and
22 clearing the cache when the user logs out from the Internet
23 access control system at the client computer.

1 7. The method of claim 1, wherein the user web access settings
2 and the URL ratings further comprise context settings for at least one
3 category of content.

1 8. The method of claim 7, wherein the context settings comprise a
2 setting that the URL contains material of artistic value.

1 9. The method of claim 7, wherein the context settings comprise a
2 setting that the URL contains material of educational value.

1 10. The method of claim 7, wherein the context settings comprise a
2 setting that the URL contains material of medical value.

1 11. The method of claim 7, wherein the category of content
2 comprises a language category.

1 12. The method of claim 11, wherein the language category of
2 content comprises a plurality of selectable language content levels and a
3 selectable context setting to optionally override the selected language content
4 level.

1 13. The method of claim 7, wherein the category of content
2 comprises a nudity and sex category.

1 14. The method of claim 13, wherein the nudity and sex category of
2 content comprises a plurality of selectable nudity and sex content levels and a

3 selectable context setting to optionally override the selected nudity and sex
4 content level.

1 15. The method of claim 7, wherein the category of content
2 comprises a violence category.

1 16. The method of claim 15, wherein the violence category of
2 content comprises a plurality of selectable violence content levels and a
3 selectable context setting to optionally override the selected violence content
4 level.

1 17. The method of claim 15, wherein the violence category
2 comprises a human being violence category.

1 18. The method of claim 15, wherein the violence category
2 comprises an animal violence category.

1 19. The method of claim 15, wherein the violence category
2 comprises a fantasy character violence category.

1 20. The method of claim 1, wherein the user web access settings
2 and the URL ratings further comprise at least one restrictive category of
3 content that may be either allowed or disallowed.

1 21. The method of claim 20, wherein the at least one restrictive
2 category of content is auctions, drug advocacy, entertainment, illegal
3 activities, gambling, games, Gay and Lesbian information, discriminatory
4 speech, information concerning higher education, intimate apparel,
5 information concerning mysticism, news, personal advertisements, personal
6 websites, politics, religion, sex education, shopping, sports, information
7 concerning suicide, weapon promotion, material that may disturb young
8 children, material that may set a bad example for young children, adult sexual

9 material, job search/careers, travel/tourism and vacation, motor vehicles, or
10 stocks and investing.

1 22. A method of controlling access to the Internet, the method
2 comprising:

3 receiving identification information for a user from a client
4 computer at a Internet access control web server;

5 sending user web access settings from the Internet access
6 control web server to the client computer, wherein the user web access
7 settings comprise a level of access allowed for the user in at least one
8 category of content;

9 receiving a Uniform Resource Locator (URL) from the client
10 computer at the Internet access control web server, wherein the URL was
11 extracted from an Internet access request at the client computer;

12 sending URL ratings from the Internet access control web server
13 to the client computer, wherein the URL ratings comprise a rating level in at
14 least one category of content that is capable of being compared to the user
15 web access settings.

1 23. The method of claim 22, further comprising:

2 sending a user web access override list from the Internet access
3 control web server to the client computer, wherein the user web access
4 override list comprises URLs to which the user is allowed access and URLs
5 to which the user is not allowed access.

1 24. The method of claim 22, wherein the user web access settings
2 and the URL ratings further comprise context settings for at least one
3 category of content.

1 25. The method of claim 24, wherein the context settings comprise a
2 setting that the URL contains material of artistic value.

1 26. The method of claim 24, wherein the context settings comprise a
2 setting that the URL contains material of educational value.

1 27. The method of claim 24, wherein the context settings comprise a
2 setting that the URL contains material of medical value.

1 28. The method of claim 24, wherein the category of content
2 comprises a language category.

1 29. The method of claim 28, wherein the language category of
2 content comprises a plurality of selectable language content levels and a
3 selectable context setting to optionally override the selected language content
4 level.

1 30. The method of claim 24, wherein the category of content
2 comprises a nudity and sex category.

1 31. The method of claim 30, wherein the nudity and sex category of
2 content comprises a plurality of selectable nudity and sex content levels and a
3 selectable context setting to optionally override the selected nudity and sex
4 content level.

1 32. The method of claim 24, wherein the category of content
2 comprises a violence category.

1 33. The method of claim 32, wherein the violence category of
2 content comprises a plurality of selectable violence content levels and a
3 selectable context setting to optionally override the selected violence content
4 level.

1 34. The method of claim 32, wherein the violence category
2 comprises a human being violence category.

1 35. The method of claim 32, wherein the violence category
2 comprises an animal violence category.

1 36. The method of claim 32, wherein the violence category
2 comprises a fantasy character violence category.

1 37. The method of claim 22, wherein the user web access settings
2 and the URL ratings further comprise at least one restrictive category of
3 content that may be either allowed or disallowed.

1 38. The method of claim 37, wherein the at least one restrictive
2 category of content is auctions, drug advocacy, entertainment, illegal
3 activities, gambling, games, Gay and Lesbian information, discriminatory
4 speech, information concerning higher education, intimate apparel,
5 information concerning mysticism, news, personal advertisements, personal
6 websites, politics, religion, sex education, shopping, sports, information
7 concerning suicide, weapon promotion, material that may disturb young
8 children, material that may set a bad example for young children, adult sexual
9 material, job search/careers, travel/tourism and vacation, motor vehicles, or
10 stocks and investing.

1 39. A system for controlling access to the Internet, the system
2 comprising:

3 a client comprising:

4 a user authentication interface that prompts a user for
5 identification information;

6 a communication manager configured to:

7 send the identification information to an Internet
8 access control web server,

9 receive user web access settings from the Internet
10 access control web server, wherein the user web access

11 settings comprise a level of access allowed for the user in at
12 least one category of content,
13 intercept an Internet access request initiated by an
14 application used at the client computer by the user;
15 send a Uniform Resource Locator (URL) extracted
16 from the Internet access request to the Internet access control
17 web server, and
18 receive URL ratings from the Internet access
19 control web server, wherein the URL ratings comprise a rating
20 level in at least one category of content; and
21 a logic module configured to:
22 compare the URL ratings to the user web access
23 settings, and
24 determine if access to the URL should be granted;
25 and
26 the Internet access control web server comprising:
27 a login manager configured to:
28 receive the identification information;
29 verify the identification information,
30 determine the user web access settings for the
31 user that correspond to the identification information, and
32 send the user web access settings to the client;
33 and
34 a lookup manager configured to:
35 receive the URL,
36 determine the URL ratings that correspond to the
37 URL, and
38 send the URL ratings to the client.

1 40. The system of claim 39, wherein the communication manager is
2 further configured to send the Internet access request to a client computer
3 networking layer, if access is granted.

1 41. The system of claim 40, wherein the communication manager is
2 further configured to:
3 edit the Internet access request to remove the URL and to
4 include a user appropriate URL, if access is not granted; and
5 send the edited Internet access request to a client computer
6 networking layer, if access is not granted.

7 42. The system of claim 41, wherein the client further comprises a
8 cache configured to:
9 store the URL;
10 store the URL as disallowed, if access is not granted; and
11 store the URL as allowed, if access is granted.

12 43. The system of claim 42, wherein
13 the communication manager is further configured to:
14 intercept an additional Internet access request initiated by
15 an application used at the client computer by the user;
16 send the additional Internet access request to the client
17 computer networking layer, if an additional URL matches a URL stored
18 in the cache as allowed; and
19 send an edited additional Internet access request to the
20 client computer networking layer, if the additional URL matches a URL
21 stored in the cache as disallowed; and
22 the logic module is further configured to:
23 extract the additional URL from the additional Internet
24 access request at the client computer;

25 compare the additional URL to each URL in the cache
26 until the additional URL matches a URL stored in the cache or until the
27 additional URL has been compared to each URL in the cache;
28 edit the additional Internet access request to remove the
29 additional URL and to include the user appropriate URL, if the
30 additional URL matches a URL stored in the cache as disallowed; and
31 clear the cache when the user logs out from the system
32 at the client computer.

1 44. The system of claim 39, wherein the communication manager is
2 further configured to receive a user web access override list from the Internet
3 access control web server, wherein the user web access override list
4 comprises URLs to which the user is allowed access and URLs to which the
5 user is not allowed access.

1 45. The system of claim 44, wherein
2 the logic module is further configured to:
3 compare the URL to the user web access override list;
4 determine if access to the URL should be granted;
5 edit the Internet access request to remove the URL and
6 to include a user appropriate URL, if access is not granted; and
7 the communication manager is further configured to:
8 send the Internet access request to a client computer
9 networking layer, if access is granted; and
10 send the edited Internet access request to the client
11 computer networking layer, if access is not granted.

1 46. The system of claim 45, wherein the client further comprises a
2 cache configured to:
3 store the URL;
4 store the URL as disallowed, if access is not granted; and

5 store the URL as allowed, if access is granted.

6 47. The system of claim 46, wherein

7 the communication manager is further configured to:

8 intercept an additional Internet access request initiated by
9 an application used at the client computer by the user;

10 send the additional Internet access request to the client
11 computer networking layer, if an additional URL matches a URL stored
12 in the cache as allowed; and

13 send an edited additional Internet access request to the
14 client computer networking layer, if the additional URL matches a URL
15 stored in the cache as disallowed; and

16 the logic module is further configured to:

17 extract the additional URL from the additional Internet
18 access request at the client computer;

19 compare the additional URL to each URL in the cache
20 until the additional URL matches a URL stored in the cache or until the
21 additional URL has been compared to each URL in the cache;

22 edit the additional Internet access request to remove the
23 additional URL and to include the user appropriate URL, if the
24 additional URL matches a URL stored in the cache as disallowed; and

25 clear the cache when the user logs out from the system
26 at the client computer.

1 48. The system of claim 39, wherein the user web access settings
2 and the URL ratings further comprise context settings for at least one
3 category of content.

1 49. The system of claim 48, wherein the context settings comprise a
2 setting that the URL contains material of artistic value.

1 50. The system of claim 48, wherein the context settings comprise a
2 setting that the URL contains material of educational value.

1 51. The system of claim 48, wherein the context settings comprise a
2 setting that the URL contains material of medical value.

1 52. The system of claim 48, wherein the category of content
2 comprises a language category.

1 53. The system of claim 52, wherein the language category of
2 content comprises a plurality of selectable language content levels and a
3 selectable context setting to optionally override the selected language content
4 level.

1 54. The system of claim 48, wherein the category of content
2 comprises a nudity and sex category.

1 55. The system of claim 54, wherein the nudity and sex category of
2 content comprises a plurality of selectable nudity and sex content levels and a
3 selectable context setting to optionally override the selected nudity and sex
4 content level.

1 56. The system of claim 48, wherein the category of content
2 comprises a violence category.

1 57. The system of claim 56, wherein the violence category of
2 content comprises a plurality of selectable violence content levels and a
3 selectable context setting to optionally override the selected violence content
4 level.

1 58. The system of claim 56, wherein the violence category
2 comprises a human being violence category.

1 59. The system of claim 56, wherein the violence category
2 comprises an animal violence category.

1 60. The system of claim 56, wherein the violence category
2 comprises a fantasy character violence category.

1 61. The system of claim 39, wherein the user web access settings
2 and the URL ratings further comprise at least one restrictive category of
3 content that may be either allowed or disallowed.

1 62. The system of claim 61, wherein the at least one restrictive
2 category of content is auctions, drug advocacy, entertainment, illegal
3 activities, gambling, games, Gay and Lesbian information, discriminatory
4 speech, information concerning higher education, intimate apparel,
5 information concerning mysticism, news, personal advertisements, personal
6 websites, politics, religion, sex education, shopping, sports, information
7 concerning suicide, weapon promotion, material that may disturb young
8 children, material that may set a bad example for young children, adult sexual
9 material, job search/careers, travel/tourism and vacation, motor vehicles, or
10 stocks and investing.

1 63. The system of claim 39, wherein the Internet access control web
2 server further comprises an account manager configured to add a user
3 account, to edit the user account, and to delete the user account.

4 64. The system of claim 63, wherein the user account comprises
5 identification information.

6 65. The system of claim 64, wherein the user account further
7 comprises web access settings comprising a level of access allowed for the
8 user account in at least one category of content.

9 66. The system of claim 65, wherein the user account further
10 comprises context settings for at least one category of content comprising
11 overrides to the level of access allowed for the user account in the category of
12 content.

13 67. The system of claim 66, wherein the user account further
14 comprises at least one restrictive category of content that may be either
15 allowed or disallowed for the user account.

1 68. The system of claim 67, wherein the user account further
2 comprises a user web access override list, wherein the user web access
3 override list comprises URLs to which the user account is allowed access and
4 URLs to which the user account is not allowed access.

1 69. The system of claim 68, wherein the user account further
2 comprises an appropriate URL for including in an Internet access request.

1 70. A computer program product for controlling access to the
2 Internet comprising:
3 computer code configured to:
4 prompt a user for identification information;
5 send the identification information to an Internet access
6 control web server,
7 receive user web access settings from the Internet
8 access control web server, wherein the user web access settings
9 comprise a level of access allowed for the user in at least one category
10 of content,
11 intercept an Internet access request initiated by an
12 application used at the client computer by the user;
13 send a Uniform Resource Locator (URL) extracted from
14 the Internet access request to the Internet access control web server,

15 receive URL ratings from the Internet access control web
16 server, wherein the URL ratings comprise a rating level in at least one
17 category of content;
18 compare the URL ratings to the user web access
19 settings, and
20 determine if access to the URL should be granted.

1 71. The computer program product of claim 70, wherein the
2 computer code is further configured to send the Internet access request to a
3 client computer networking layer, if access is granted.

1 72. The computer program product of claim 71, wherein the
2 computer code is further configured to:
3 edit the Internet access request to remove the URL and to
4 include a user appropriate URL, if access is not granted; and
5 send the edited Internet access request to the client computer
6 networking layer, if access is not granted.

7 73. The computer program product of claim 72, wherein the
8 computer code is further configured to:
9 store the URL in a cache at the client computer;
10 store the URL in the cache as disallowed, if access is not
11 granted;
12 store the URL in the cache as allowed, if access is granted;
13 intercept an additional Internet access request initiated by an
14 application used at the client computer by the user;
15 extract an additional URL from the additional Internet access
16 request at the client computer;
17 compare the additional URL to each URL in the cache until the
18 additional URL matches a URL stored in the cache or until the additional URL
19 has been compared to each URL in the cache;

20 send the Internet access request to the client computer
21 networking layer, if the additional URL matches a URL stored in the cache as
22 allowed;
23 edit the additional Internet access request to remove the
24 additional URL and to include the user appropriate URL, if the additional URL
25 matches a URL stored in the cache as disallowed;
26 send the edited additional Internet access request to the client
27 computer networking layer, if the additional URL matches a URL stored in the
28 cache as disallowed; and
29 clear the cache when the user logs out from the computer
30 program product.

1 74. The computer program product of claim 70, wherein the
2 computer code is further configured to:
3 receive a user web access override list from the Internet access
4 control web server at the client computer, wherein the user web access
5 override list comprises URLs to which the user is allowed access and URLs to
6 which the user is not allowed access;
7 compare the URL to the user web access override list at the
8 client computer;
9 determine if access to the URL should be granted at the client
10 computer;
11 send the Internet access request to a client computer
12 networking layer, if access is granted;
13 edit the Internet access request to remove the URL and to
14 include a user appropriate URL, if access is not granted; and
15 send the edited Internet access request to the client computer
16 networking layer, if access is not granted.

1 75. The computer program product of claim 74, wherein the
2 computer code is further configured to:

3 store the URL in a cache at the client computer;
4 store the URL in the cache as disallowed, if access is not
5 granted;
6 store the URL in the cache as allowed, if access is granted;
7 intercept an additional Internet access request initiated by an
8 application used at the client computer by the user;
9 extract an additional URL from the additional Internet access
10 request at the client computer;
11 compare the additional URL to each URL in the cache until the
12 additional URL matches a URL stored in the cache or until the additional URL
13 has been compared to each URL in the cache;
14 send the Internet access request to the client computer
15 networking layer, if the additional URL matches a URL stored in the cache as
16 allowed;
17 edit the additional Internet access request to remove the
18 additional URL and to include the user appropriate URL, if the additional URL
19 matches a URL stored in the cache as disallowed;
20 send the edited additional Internet access request to the client
21 computer networking layer, if the additional URL matches a URL stored in the
22 cache as disallowed; and
23 clear the cache when the user logs out from the computer
24 program product.

1 76. The computer program product of claim 70, wherein the user
2 web access settings and the URL ratings further comprise context settings for
3 at least one category of content.

1 77. The computer program product of claim 76, wherein the context
2 settings comprise a setting that the URL contains material of artistic value.

1 78. The computer program product of claim 76, wherein the context
2 settings comprise a setting that the URL contains material of educational
3 value.

1 79. The computer program product of claim 76, wherein the context
2 settings comprise a setting that the URL contains material of medical value.

1 80. The computer program product of claim 76, wherein the
2 category of content comprises a language category.

1 81. The computer program product of claim 80, wherein the
2 language category of content comprises a plurality of selectable language
3 content levels and a selectable context setting to optionally override the
4 selected language content level.

1 82. The computer program product of claim 76, wherein the
2 category of content comprises a nudity and sex category.

1 83. The computer program product of claim 82, wherein the nudity
2 and sex category of content comprises a plurality of selectable nudity and sex
3 content levels and a selectable context setting to optionally override the
4 selected nudity and sex content level.

1 84. The computer program product of claim 76, wherein the
2 category of content comprises a violence category.

1 85. The computer program product of claim 84, wherein the violence
2 category of content comprises a plurality of selectable violence content levels
3 and a selectable context setting to optionally override the selected violence
4 content level.

1 86. The computer program product of claim 84, wherein the violence
2 category comprises a human being violence category.

1 87. The computer program product of claim 84, wherein the violence
2 category comprises an animal violence category.

1 88. The computer program product of claim 84, wherein the violence
2 category comprises a fantasy character violence category.

1 89. The computer program product of claim 70, wherein the user
2 web access settings and the URL ratings further comprise at least one
3 restrictive category of content that may be either allowed or disallowed.

1 90. The computer program product of claim 89, wherein the at least
2 one restrictive category of content is auctions, drug advocacy, entertainment,
3 illegal activities, gambling, games, Gay and Lesbian information,
4 discriminatory speech, information concerning higher education, intimate
5 apparel, information concerning mysticism, news, personal advertisements,
6 personal websites, politics, religion, sex education, shopping, sports,
7 information concerning suicide, weapon promotion, material that may disturb
8 young children, material that may set a bad example for young children, adult
9 sexual material, job search/careers, travel/tourism and vacation, motor
10 vehicles, or stocks and investing.

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